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**REPORT OF THE PRESIDENT OF THE ACADEMY
 FOR THE YEAR 1921**

By C. E. GRUNSKY
President of the Academy

The activities of the California Academy of Sciences during the year 1921 have resulted in some notable achievements, as will appear from the reports of your officers about to be presented.

There has been an increase of 65 in membership which is now close to the 1000 mark. New members to the number of 110 were admitted. The loss by death was 28; by resignation, 14; and dropped for arrearages, 3. At the beginning of the year the members numbered 927; on January first, 1922, they numbered 992.

The present membership is made up of:

Patrons	12
Honorary Members	25
Life Members	83
Fellows	24
Members	848
Total	992

The Academy carries on its list of Patrons the following names:

Living

William B. Bourn
 William H. Crocker
 Peter F. Dunne
 Barton Warren Evermann
 Herbert Fleishhacker
 Joseph D. Grant

A. Kingsley Macomber
 John W. Mailliard
 Joseph Mailliard
 M. Hall McAllister
 Ogden Mills
 William C. Van Antwerp

Deceased

William Alvord	James Lick
Charles Crocker	Alexander F. Morrison
John W. Hendrie	Amariah Pierce
Mrs. Charlotte Hosmer	Ignatz Steinhart

Those who were called by death during 1921 are as follows:

Dr. J. A. Allen.....	Honorary.....	August 29, 1921
Mr. James Baumberger.....	Member.....	November 21, 1921
Prof. Charles B. Cory.....	Honorary.....	July 29, 1921
Mrs. Nelly Waterhouse Dorne.....	Member.....	March 25, 1921
Mr. Alex. Goldstein.....	Member.....	April 5, 1921
Mr. Howard C. Holmes.....	Member.....	October 31, 1921
Mr. C. Frederick Kohl.....	Life Member.....	November 23, 1921
Mr. John Lederer.....	Member.....	November 24, 1921
Mr. A. F. Morrison.....	Patron.....	November 13, 1921
Mr. Henry Payot.....	Life Member.....	November 21, 1921
Mr. Harry L. Roff.....	Member.....	February 3, 1921
Mrs. Sidney Smith.....	Member.....	November 3, 1921
Mr. Donald F. Tillinghast.....	Member.....	December 11, 1921
Mr. George D. Toy.....	Member.....	January, 1921
Mr. Louis Weimann.....	Member.....	April 25, 1921
Mr. Vinoy Westfall.....	Member.....	March 8, 1921
Mr. John E. Williams.....	Member.....	1921
Mr. Thomas S. Wilson.....	Member.....	December 26, 1921

The Academy has published during 1921 the following papers in continuation of the Fourth Series of the Proceedings:

- Vol. X, No. 11, pp. 119-127—REPORT OF THE PRESIDENT OF THE ACADEMY FOR THE YEAR 1920, by C. E. Grunsky.
- Vol. X, No. 12, pp. 128-163—REPORT OF THE DIRECTOR OF THE MUSEUM FOR THE YEAR 1920, by Barton Warren Evermann.
- Vol. XI, No. 1, pp. 1-26—NOTES ON A FAUNA OF THE VIGO GROUP AND ITS BEARING ON THE EVOLUTION OF MARINE MOLLUSCAN FAUNAS, by Roy E. Dickerson.
- Vol. XI, No. 2, pp. 27-38—A LIST OF THE AMPHIBIANS AND REPTILES OF NEVADA, WITH NOTES ON THE SPECIES IN THE COLLECTION OF THE ACADEMY, by John Van Denburgh and Joseph R. Slevin.
- Vol. XI, No. 3, pp. 39-47—A LIST OF THE AMPHIBIANS AND REPTILES OF IDAHO, WITH NOTES ON THE SPECIES IN THE COLLECTION OF THE ACADEMY, by John Van Denburgh and Joseph R. Slevin.
- Vol. XI, No. 4, pp. 49-72—A LIST OF THE AMPHIBIANS AND REPTILES OF THE PENINSULA OF LOWER CALIFORNIA, WITH NOTES ON THE SPECIES IN THE COLLECTION OF THE ACADEMY, by John Van Denburgh and Joseph R. Slevin.
- Vol. XI, No. 5, pp. 73-94—NOTES ON THE BIRDS AND MAMMALS OF SISKIYOU Co., CALIFORNIA, by Joseph Mailliard.
- Vol. XI, No. 6, pp. 95-98—PRELIMINARY DIAGNOSES OF NEW SPECIES OF REPTILES FROM ISLANDS IN THE GULF OF CALIFORNIA, MEXICO, by John Van Denburgh and Joseph R. Slevin.
- Vol. XI, No. 7, pp. 99-102—NEW CALIFORNIAN SPIDERS, by Nathan Banks.
- Vol. XI, No. 8, pp. 103-107—UNDESCRIBED TIPULIDÆ (DIPTERA) FROM WESTERN NORTH AMERICA, PART II, by Charles P. Alexander.
- Vol. XI, No. 9, pp. 109-110—DESCRIPTION OF A NEW SPECIES OF PERO FROM CALIFORNIA, by W. S. Wright.

- Vol. XI, No. 10, pp. 111-134—CHARACTERS OF SOME NEW SPECIES OF NORTH AMERICAN HEMIPTEROUS INSECTS, WITH ONE NEW GENUS, by Edward P. Van Duzee.
- Vol. XI, No. 11, pp. 135-136—OUR NORTH AMERICAN SPECIES OF STRONGYLOCORIS (HEMIPTERA), by Edward P. Van Duzee.
- Vol. XI, No. 12, pp. 137-144—CHARACTERS OF EIGHT NEW SPECIES OF NORTH AMERICAN ANTHOCORIDÆ OR FLOWER BUGS, by Edward P. Van Duzee.
- Vol. XI, No. 13, pp. 145-152—A STUDY OF NORTH AMERICAN GRASS BUGS OF THE GENUS IRBISIA, by Edward P. Van Duzee.
- Vol. XI, No. 14, pp. 153-195—INSECTS OF THE PRIBILOF ISLANDS, ALASKA: INTRODUCTION, by G. Dallas Hanna; COLEOPTERA, by Edwin C. Van Dyke; HYDROPHORUS FUMIPENNIS, by M. C. Van Duzee; DIPTERA (GENERAL REPORT), by F. R. Cole; ANTHOMYIIDÆ, by J. R. Malloch; TIPULIDÆ, by C. P. Alexander; HYMENOPTERA (BREMIDÆ), by Theodore H. Frison; HYMENOPTERA (SAW-FLIES), by Alexander D. MacGillivray; and ORTHOPTERA, NEUROPTERA, HEMIPTERA AND LEPIDOPTERA, by E. P. Van Duzee.
- Vol. XI, No. 15, pp. 197-344—AN ANNOTATED LIST OF THE DIPTERA (FLIES) OF OREGON, by F. R. Cole and A. L. Lovett.
- Vol. XI, No. 16, pp. 345-393—REVISION OF THE PIPIZA GROUP OF THE FAMILY SYRPHIDÆ (FLOWER-FLIES) FROM NORTH OF MEXICO, by C. Howard Curran.
- Vol. XI, No. 17, pp. 395-398—PRELIMINARY DIAGNOSES OF MORE NEW SPECIES OF REPTILES FROM ISLANDS IN THE GULF OF CALIFORNIA, MEXICO, by John Van Denburgh and Joseph R. Slevin.

During the year 1921 eleven free lectures were delivered at the stated meetings of the Academy, as follows:

- JANUARY 5. Vanishing Wild Life in California—Cause and Remedy, by Mr. E. R. Zion, Efficiency Expert, Civil Service Commission, San Francisco, Calif.
- MARCH 2. Experiences in the Gulf of California, by Mr. Rufus A. Coleman, United States Bureau of Fisheries, San Francisco, Calif.
- APRIL 6. Erosion in California in Relation to Forestry, by Mr. E. N. Munns, Forest Examiner, United States Forest Service, San Francisco, Calif.
- MAY 4. The Relation of Pacific Coast Rainfall to the World System of Rain Belts, by Dr. Marsden Manson, San Francisco, Calif.
- JUNE 1. Historical Sketch of the Scripps Institution and Illustrative Examples of certain researches that it has undertaken, by Dr. George F. McEwen, Oceanographer, Scripps Institution for Biological Research, La Jolla, Calif.
- JULY 6. Field Work in Del Norte County during the spring of 1921, by Mr. Jos. Mailliard, Curator of Ornithology and Mammalogy, California Academy of Sciences, San Francisco, Calif.
- AUGUST 3. Diatoms, the Jewels of the Plant World, by Dr. Albert Mann of the Carnegie Institution of Washington, Washington, D. C.
- SEPTEMBER 7. The 1921 California Academy of Sciences Expedition to the Gulf of California, by Mr. E. P. Van Duzee, Curator, Department of Entomology, California Academy of Sciences.

- OCTOBER 5. Observations on the Geology of Colombia, by Mr. F. M. Anderson, Berkeley, California.
- NOVEMBER 2. Bacterial Food Poisoning, by Dr. Ivan C. Hall, Associate Professor of Bacteriology, University of California.
- DECEMBER 7. Field Work of the Department of Ornithology and Mammalogy during 1921, by Mr. Joseph Mailliard, Curator, Department of Ornithology and Mammalogy, California Academy of Sciences, San Francisco.

The Sunday Afternoon lectures delivered in the Museum Building during 1921 have been well attended; they have included the following:

- JANUARY 2. Atoms and Ions, by Dr. E. P. Lewis, Professor of Physics, University of California, Berkeley.
- JANUARY 9. Electrons and Positive Rays, by Dr. E. P. Lewis, Professor of Physics, University of California, Berkeley.
- JANUARY 16. Radioactive Transformations, by Dr. E. P. Lewis, Professor of Physics, University of California, Berkeley.
- JANUARY 23. General Properties of X and Gamma Rays, by D. L. Webster, Professor of Physics, Stanford University, California.
- JANUARY 30. Photography of the Planets, with Special Reference to Mars, by Dr. E. C. Slipher, Lowell Observatory, Flagstaff, Ariz.
- FEBRUARY 6. X-Ray Spectra, by Dr. D. L. Webster, Professor of Physics, Stanford University, California.
- FEBRUARY 13. The Structure of Atoms, by Dr. D. L. Webster, Professor of Physics, Stanford University, California.
- FEBRUARY 20. How Uncle Sam's Money is Wasted, by Mr. Edward Berwick, Member of the Institute of International Law, Pacific Grove, Calif.
- FEBRUARY 27. The Dimensions of the Stellar Universe, by Dr. Harlow Shapely, Mount Wilson Observatory, Pasadena, Calif.
- MARCH 6. Eighteen Thousand Miles in Search of Mosquitoes in California—How and Why, by Major W. B. Herms, Associate Professor of Parasitology, University of California, Berkeley.
- MARCH 13. Parasitism among Insects, by Mr. Harry S. Smith, Entomologist, State Department of Agriculture, Sacramento, Calif.
- MARCH 20. Some Injurious Forest Insects of California, by Dr. E. C. Van Dyke, Assistant Professor of Entomology, University of California, Berkeley.
- MARCH 27. Evolution of the Ancient Orders of Insects, by Professor C. W. Woodworth, Professor of Entomology, University of California, Berkeley.
- APRIL 3. The Evolution of California Scenery, by Dr. R. S. Holway, Associate Professor of Physical Geography, University of California, Berkeley.
- APRIL 10. Ancient Seas and their Faunas, by Dr. B. L. Clark, Assistant Professor of Paleontology, University of California, Berkeley.
- APRIL 24. The Former Mammalian Life of California, by Dr. Chester Stock, Research Assistant, Department of Paleontology, University of California, Berkeley.

- MAY 1. The Relation of Pacific Coast Rainfall to the World System of Rain Belts, by Dr. Marsden Manson, San Francisco.
- MAY 8. Weather Forecasts, Ancient and Modern, by Mr. E. A. Beals, Meteorologist, United States Weather Bureau, San Francisco.
- MAY 15. Some Popular Misconceptions about California Climate, by Mr. B. M. Varney, Instructor in Geography, University of California, Berkeley.
- MAY 22. Aviation and Meteorology, by Mr. Thomas R. Reed, Meteorologist, United States Weather Bureau, San Francisco.
- MAY 29. The Science of the Sea and Applications to our Pacific Coast Waters, by Dr. George F. McEwen, Oceanographer, Scripps Institution for Biological Research, La Jolla, Calif.
- JUNE 5. Researches on the Figure of the Earth, including a definite Determination of the Oblateness, by Captain T. J. J. See, Professor of Mathematics, United States Navy, Mare Island, Calif.
- SEPTEMBER 25. Birds and Mammals of the Mount Rainier National Park, by Dr. Walter P. Taylor, Biologist, Bureau of Biological Survey, La Jolla, Calif.
- OCTOBER 2. The Flora of Mount Rainier National Park, by Miss Alice Eastwood, Curator, Department of Botany, California Academy of Sciences, San Francisco.
- OCTOBER 9. Mammals of the Yosemite National Park, by Dr. Joseph Grinnell, Director, Museum of Vertebrate Zoology, University of California, Berkeley.
- OCTOBER 16. Questions concerning distribution of life in the open Sea, by Mr. W. E. Allen, Biologist and Publicity Secretary, Scripps Institution for Biological Research, La Jolla, Calif.
- OCTOBER 23. The Next War and our Chemical Warfare Service, by Mr. Edward Berwick, Pacific Grove, Calif.
- OCTOBER 30. National Forests as Recreation Grounds, by Mr. Paul J. Fair, Constructor of Educational Material, United States Forest Service, San Francisco.
- NOVEMBER 6. The Yosemite National Park—Its History, Geology and Scenic Features, by Mr. Ansel F. Hall, Park Naturalist, Yosemite National Park, Calif.
- NOVEMBER 13. Birds of the Yosemite National Park, by Prof. Tracy I. Storer, Museum of Vertebrate Zoology, University of California, Berkeley.
- NOVEMBER 20. Nature Guiding in a National Park, by Dr. Harold C. Bryant, Economic Ornithologist, University of California, Berkeley.
- NOVEMBER 27. The Birds of the High Sierra and their Homes, by Dr. William F. Badè, President of the Sierra Club, Berkeley, Calif.
- DECEMBER 4. Yellowstone Park—Last Stand of the Old West, by Mr. Horace M. Albright, Superintendent of the Yellowstone National Park, Wyoming.
- DECEMBER 11. Some Activities in California of the Bureau of Plant Industry, United States Department of Agriculture, by Mr. G. P. Rixford, Physiologist, Bureau of Plant Industry, United States Department of Agriculture, San Francisco.
- DECEMBER 18. The Hawaii National Park, by Mr. Will J. Cooper, Agent, Hawaii Tourist Bureau, San Francisco.

The Academy during this year curtailed its general activities to some extent in order to make possible an expedition into the Gulf of California where collections were made for the various departments. The results of this expedition are fully covered in the report of the Director of the Museum and in the reports of the Academy's curators, and nothing remains to be said about it except that it was eminently successful and has added materially to our knowledge of the fauna and flora of a region that has long waited for thorough scientific exploration. The Academy sincerely appreciates the sacrifices of those who went on the expedition and is thankful for the sustained effort of each, which was essential for its success.

It can now be announced that plans for the Steinhart Aquarium have been approved by the City and Park authorities as also by the executors of the estate of the late Ignatz Steinhart, and that bids for the construction thereof have been called for. It is hoped that contracts for its construction can be entered into soon after March first. The apparent delay in entering upon construction will prove of benefit to the enterprise in two ways: first, because interest has been accumulating and more money is therefore available than named in the bequest; and second, because the cost of building is now considerably less than it was several years ago. A year from now the Academy will be asking the City to make provision for operation.

The financial standing of the Academy is set forth in the Treasurer's report. There have been no unusual sources of income. Our regular income from rents and dues and sales of publications and the like has been about \$77,000.

Among the receipts and expenditures of special note attention may be called to the following:

The Gulf of California Expedition sailed from San Francisco on April 2, 1921, chartered the schooner "Silver Gate" at Guaymas, and spent three months in exploring the islands and shores of the Gulf. The total expense of this expedition was \$8,515.22.

The purchase of the Albert Prager Herbarium which has been added to the collection of the Botanical Department dur-

ing the year at a total expense of \$1,266.53, was made possible by the following donations:

Wm. C. Van Antwerp.....	\$120	A. F. Morrison.....	\$200
Wm. M. Fitzhugh.....	200	Wm. F. Herrin.....	200
J. D. Grant.....	100	Wm. H. Crocker.....	200
John C. Augsbury.....	100		

The following have been added to the list of Life Members of the Academy:

Adolph B. Spreckels.....	\$100	Albert Meyer.....	\$250
Mrs. Anna J. Kaseberg.....	100	Edward Jesurum.....	100
Irving Miller.....	100		

The mortgage indebtedness of the Academy which was originally \$300,000, has been again reduced during the year by a payment of \$10,000. This leaves an unpaid balance of \$280,000.

Further contributions during the year toward the cost of the game paddocks in the Yosemite Valley have been received to the amount of \$250. A balance of \$286.11 remains yet to be collected for which Mr. M. Hall McAllister has kindly undertaken to be responsible.

The Grizzly Bear habitat group, which, as noted heretofore, has been made possible by a donation of \$5,000 by Mr. Ogden Mills is nearing completion. This fills the last of the large alcoves available for such exhibits. Special attention will now be given to completing the installation of the habitat groups of small mammals and fully utilizing the remaining exhibition space.

The Academy is rapidly outgrowing the accommodations which its museum building affords. Another structure as large as the one now occupied is needed; but if dependence must be placed on the Academy resources alone it will be long before its erection can be undertaken. Here would be an excellent opportunity for some one materially to assist the Academy's educational and research work by donating funds for the building.

Aside from the work done by the Academy in its regular departments, the Academy has assisted during the year in the conservation of wild animal life. There was appointed a "Committee on the Conservation of Wild Animal Life" and this committee has had in charge the distribution of Cali-

fornia Valley Elk; the protection of the Antelope herds, of Mountain Sheep, and Roosevelt Elk; also the building of the game paddocks stocked with elk in the Yosemite Valley and the providing of an antelope refuge at Mount Dome in Siskiyou County. This last named undertaking has attracted the attention of the American Bison Society and the New York Zoological Society both of which have subscribed to the necessary fund. The committee has arranged with the United States Forest Service for the care of this herd of antelope numbering now about 100. They are now regularly fed by a paid keeper or guardian, Mr. Ash Carsley, who sends in semi-monthly reports. Outside of Yellowstone Park this, according to the committee report, is the finest, most compact, tamest, and most accessible herd of wild antelope in the West. The committee is issuing a "Distribution Map of California" which shows the location of the antelope, the elk and bighorn or mountain sheep in California. It is expected that forest rangers, game wardens, and others who have opportunity to observe will advise the committee where and when any of these animals are seen.

Death, during the year, has deprived the Academy of its legal advisor, Mr. A. F. Morrison, and since the close of the year death has taken one member from the official staff of the Academy, Mr. Rudolph J. Taussig, who has served for a number of years as Treasurer. To both of these late members the Academy is deeply indebted for valuable aid in the conduct of its affairs, and their associates keenly feel the loss which they and the Academy have sustained.

To all of those who have in any way contributed to, or assisted in, the Academy's activities, or who have helped to increase its service to the public, the officers of the Academy extend thanks. They commend, too, the good work done by the several departments which, however, will show for itself in the various reports which are about to be presented.